	Application No.	Applicant(s)	
Notice of Allowability			
	10/784,811 Examiner	CHEN ET AL. Art Unit	
	Examiner	Artonic	
	Michael A. Lyons	2877	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT Record the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this or other appropriate communica GHTS. This application is subje	s application. If not included ation will be mailed in due cou	urse. THIS
1. X This communication is responsive to <u>03 May 2006</u> .			
2. ☑ The allowed claim(s) is/are <u>1-17</u> .			
 3. ☐ Acknowledgment is made of a claim for foreign priority un a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have 		.	
2. Certified copies of the priority documents have	been received in Application N	O	
3. Copies of the certified copies of the priority doc	cuments have been received in	this national stage applicatior	n from the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		eply complying with the requir	rements
4. A SUBSTITUTE OATH OR DECLARATION must be submi INFORMAL PATENT APPLICATION (PTO-152) which give			ICE OF
5. CORRECTED DRAWINGS (as "replacement sheets") must	t be submitted.		
(a) including changes required by the Notice of Draftsperso	on's Patent Drawing Review (P	TO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	Amendment / Comment or in t	he Office action of	
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the	84(c)) should be written on the dine header according to 37 CFR 1.	awings in the front (not the ba 121(d).	ck) of
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT F 	sit of BIOLOGICAL MATERIA	AL must be submitted. Not	e the
Attachment(c)			
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. Notice of Inform	nal Patent Application (PTO-1	52)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summ		
Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date	Paper No./Mai 8), 7. ☐ Examiner's Am		
4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's Stat	ement of Reasons for Allowa	ince
of Biological Material	9.		

DETAILED ACTION

Terminal Disclaimer

The terminal disclaimer filed on May 3, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent 6,744,519 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

Claims 1-17 are allowed in view of the prior art.

The following is an examiner's statement of reasons for allowance:

As for claim 1, the prior art of record, taken either alone or in combination, fails to disclose or render obvious a fiber optic gyroscope, the gyroscope comprising a loop closure electronic circuit, the circuit generating a first phase step signal for determining a rate of rotation, a color noise suppression module coupled to the loop closure electronic circuit, the module generating a randomized phase jump amplitude signal, and an accumulation point, the accumulation point summing the phase jump amplitude signal and the first phase step signal to create a feedback signal for the gyroscope, in combination with the rest of the limitations of the above claim.

As for claim 8, the prior art of record, taken either alone or in combination, fails to disclose or render obvious a fiber optic gyroscope with color noise suppression, the gyroscope comprising an electro-optic crystal phase modulator that generates a modulated signal, a first phase jump signal added to the modulated signal, a photo detector coupled to the modulator to detect a modulated signal, an amplifier to amplify the modulated signal, an analog-to-digital converter, the converter converting the modulated signal to a digital modulated signal, a phase

jump amplitude and timing controller to generate a randomized phase jump amplitude signal, the signal being combined with the modulated signal to create a feedback signal, with the feedback signal being coupled to an input of the electro-optic crystal phase modulator, in combination with the rest of the limitations of the above claim.

As for claim 13, the prior art of record, taken either alone or in combination, fails to disclose or render obvious a method comprising the creation of a plurality of phase steps to determine a rate of rotation signal in a fiber optic gyroscope, the accumulation of a plurality of phase steps to create an accumulated phase step signal, the creation of a randomized phase jump amplitude signal for enabling color noise suppression, and the summation of the phase jump amplitude signal with the accumulated phase step signal to create a feedback signal for the fiber optic gyroscope, in combination with the rest of the limitations of the above claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Lyons whose telephone number is 571-272-2420. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/784,811

Art Unit: 2877

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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MAL August 30, 2006

> Gregory J Todley Jr. Supervisory Fatant Examiner